

CLAIMS

1. A motor vehicle drive control system providing control means which drives each drive actuator of an engine throttle, a steering, and brakes according to detection result of operation states of a motor vehicle to perform stability control at the time of motor vehicle traveling, characterized by comprising:

a plurality of sensor units which are provided in the front and rear, and left and right of a motor vehicle body respectively, detect first acceleration generated in a fore-and-aft direction of the motor vehicle body, second acceleration generated in a left-and-right direction of the vehicle body, and third acceleration generated in a up-and-down direction of the motor vehicle body, convert detection result into digital values, and transmit digital information including the digital values; and

a monitoring device which receives the digital information transmitted from the sensor units, and acquires the detection result of the first to third accelerations every sensor unit, wherein the control means has means of performing correction control of drive of a predetermined drive actuator among the respective drive actuators on the basis of the detection result of the first to third accelerations acquired by the monitoring device.

2. The motor vehicle drive control system according to claim 1, characterized in that the each sensor unit is provided in each of the front and rear, and left and right of a motor vehicle body except a wheel.

3. The motor vehicle drive control system according to claim 2, characterized in that the each sensor unit is provided in an arm which

supports an axle.

4. The motor vehicle drive control system according to claim 1, characterized in that the each sensor unit is provided in each of a plurality of bodies of rotation which are provided in a motor vehicle body side, fix wheels, and rotate the wheels.

5. The motor vehicle drive control system according to claim 4, characterized in that the each sensor unit is provided in a brake disc which rotates with an axle.

6. The motor vehicle drive control system according to claim 1, characterized in that a central sensor unit which is provided in a center section of the motor vehicle body, detects first acceleration applied in a fore-and-aft direction of the vehicle body, second acceleration applied in a right-and-left direction of the vehicle body, and third acceleration applied in a up-and-down direction of the vehicle body, converts the detection result into digital values, and transmits digital information including the digital values, that the monitoring device has means of receiving digital information transmitted from the central sensor unit, and acquiring the detection result of the first to third accelerations by the central sensor unit; and

that the control means has means of performing correction control of drive of the predetermined drive actuator on the basis of detection result of the first to third accelerations acquired by the monitoring device.

7. The motor vehicle drive control system according to claim 1, characterized in that the sensor unit comprises:

means of wave-receiving an electromagnetic wave at a first frequency;

means of transforming into electrical drive energy the wave-received electromagnetic wave energy at the first frequency; and

means of operating by the electrical energy and transmitting the digital information using an electromagnetic wave at a second frequency; and

that the monitoring device comprises:

means of radiating an electromagnetic wave at the first frequency;

means of wave-receiving the electromagnetic wave at the second frequency; and

means of extracting the digital information from the wave-received electromagnetic wave at the second frequency.

8. The motor vehicle drive control system according to claim 7, characterized in that the first frequency and the second frequency are the same frequencies.

9. The motor vehicle drive control system according to claim 1, characterized in that the sensor unit comprises:

means of operating with electrical energy supplied using a cable, and transmitting the digital information using the cable, and

that the monitoring device comprises:

means of receiving the digital information, which is transmitted, using the cable.

10. The motor vehicle drive control system according to any one of claims 1 to 9, characterized in that the sensor unit has memory means where identification information unique to itself is contained, and

means of transmitting the identification information included in the digital information; and

that the monitoring device has means of identify the sensor unit by the identification information.

11. The motor vehicle drive control system according to claim 1, characterized in that the sensor unit comprises a semiconductor acceleration sensor having a silicon piezo type diaphragm detecting accelerations in directions which are orthogonal mutually.

12. The motor vehicle drive control system according to claim 1, characterized in that the each sensor unit is provided in each of four corners of the front and rear, and left and right of a motor vehicle body.

13. A sensor unit which is provided in each of the front and rear, and left and right of a motor vehicle body or in a center section of the motor vehicle body, and detects acceleration generated in connection with motor vehicle traveling, characterized by comprising:

means of detecting first acceleration generated in a fore-and-aft direction of a motor vehicle body, second acceleration generated in a left-and-right direction of the motor vehicle body, and third acceleration generated in a up-and-down direction of the motor vehicle body;

means of converting detection result of the first to third accelerations into a digital value; and

means of transmitting digital information containing the digital value.

14. The sensor unit according to claim 13, characterized by comprising:

means of wave-receiving an electromagnetic wave at a first frequency;

means of transforming into electrical drive energy the wave-received electromagnetic wave energy at the first frequency; and

means of operating by the electrical energy and transmitting the digital information using an electromagnetic wave at a second frequency.

15. The sensor unit according to claim 14, characterized in that the first frequency and the second frequency are the same frequencies.

16. The sensor unit according to claim 13, characterized by comprising means of operating with electrical energy supplied using a cable, and transmitting the digital information using the cable.

17. The sensor unit according to any one of claims 13 to 16, characterized by comprising:

memory means where identification information unique to itself is contained; and

means of transmitting the identification information included in the digital information.

18. The sensor unit according to claim 13, characterized by comprising a semiconductor acceleration sensor having a silicon piezo type diaphragm detecting accelerations in directions which are orthogonal mutually.